Psychosomatic Considerations of Gastric Disease*

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THAT the program committee should see fit to ask a psychiatrist to participate in this symposium on stomach diseases is in itself heartening proof that present-day medical thinking on this subject is undergoing considerable mellowing. Or, have we just come to our wits' end in regard to the management of recurrent peptic ulcer so that we are now willing to listen to the less tangible (but I hope not less practical) psychiatric concepts concerning the disorders of gastric function?

As has so often been the practice, the psychiatrist is usually the last consultant to be called in when all the physical avenues of investigation and treatment have been pursued without permanent benefit, and the patient is, as a consequence, regarded as more or less "neurotic." There is no doubt that many individuals with chronic, recurrent stomach disorders are in a sense "neurotic," but let us examine the nature of their nervousness with a little more precision than is usually accorded such cases in routine clinical investigation. I should like, at the outset of this discussion, to point out that the psychosomatic approach to disease does not mean that one should study the "soma" any less, but rather study the "psyche" more.

It has been known for many years that emotional disturbances may bring about alterations in digestive function. Over a hundred years ago Beaumont [3] in his well known report of Alex St. Martin, a patient who lived with a gastric fistula until the age of 78, gave us our first important facts regarding the physiology of the stomach. Beaumont's interests were concerned mainly with the chemistry of gastric juice. Many years later, Pavlov,[5] the Russian physiologist, used the fistula technique in the study of gastric physiology in dogs, and showed experimentally the relationship between environmental situations and prolonged alterations in gastric function. Then came the important contributions of Cannon,[4] whose experimental studies demonstrated the effect which specific emotional factors, such as anger or fear, have on gastric function. Cannon contributed, more than anyone else, to present-day thinking on this subject and his ideas have provided us with a new approach in the field of gastro-enterology.

In light of present knowledge of psychodynamic mechanisms, we can no longer dismiss with the antiquated expression "nervous indigestion," patients who suffer with chronic gastric disorder. Those of us who during the war had an opportunity to observe soldiers before they went into combat, know well that empty feeling in the pit of the stomach, or the nausea and vomiting which accompanies the fear in such situations. This is no less true in civilian life, where the business man suffers from indigestion or anorexia during important conferences or when threatened with financial loss. In the home, the nervous housewife develops indigestion or constipation when worried over her children's illnesses or the thought of spring housecleaning. And even the child himself who is not getting along well with his teacher may have an attack of vomiting some morning just as he is about to leave for school. The stomach has, therefore, been referred to by many as the "sounding board of the emotions."

Despite the fact that this relationship between the emotional state and the stomach is so well known, it is remarkable what scant attention has been afforded this matter in the actual handling of gastric disorders by many practitioners and gastro-enterologists. Inadequate evaluation is made of the patient's personality and of the life situation in which the symptoms occur. The general practitioner does not have time for adequate investigation of the life situation. Placing the patient on the traditional ulcer diet and giving him a prescription for an antacid powder is quicker. Even though most doctors are cognizant that there is a large nervous element present, they often look upon this feature as secondary and as a consequence of the physical disorder. As Weiss and English [6] have emphasized "the average general practitioner accepts psychogenesis only abstractly and with vague understanding of the nature of mental mechanisms and the part they play in illness. He somehow feels that psychic factors in illness are not on the same scientific level with such procedures as gastric analyses, x-ray studies, etc."

In other words, it is well understood by many physicians and patients, too, that emotions may be a force that will produce disturbances in various parts of the gastro-intestinal tract, but beyond paying lip service to this concept very little is done about it. Even though the patient himself realizes that nervousness is an important factor in causing his gastric symptoms, he, too, is trained to believe that physical measures, diet and medication will adequately provide the answer to his problem. The general practitioner may even have a more subtle reason for pursuing his investigation along strict organic lines, for he may not know just exactly what he would do if the patient should request psychotherapy from him. Advice merely to avoid worry and strain and get plenty of rest, represents the extent of usual psychotherapy. I hope, in this brief discussion, to be able to give you a little better understanding of the connection between emotional problems and gastro-intestinal illness and touch upon a few practical, as

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well as theoretical points regarding the psychotherapy of such cases.

DIAGNOSIS OF TYPE OF ULCER IMPORTANT

Before any system of therapy is inaugurated, one should accurately determine the exact type of peptic ulcer which is present. For example, it is important to distinguish between acute and chronic gastric ulcer. Even most competent internists and roentgenologists often cannot differentiate between a benign and malignant chronic gastric ulcer in questionable cases. The final diagnosis often rests on microscopic evidence. Until definite diagnosis between benign and malignant gastric ulcer can be made, the surgical approach is preferable to any conservative treatment, medical or psychotherapeutic. This does not apply, of course, to the management of simple, early uncomplicated gastric ulcers so frequently seen in young persons; such cases may therapeutically be placed in the same category as duodenal ulcer.

The problem of duodenal ulcer may, in general, be viewed more optimistically than gastric ulcer but even here, when the duodenal ulcer penetrates beneath the mucosa and becomes indolent and refractory to medical management, psychotherapy obviously does not provide an appropriate answer. The patients may have to be treated surgically first, and afterwards may be handled psychotherapeutically in hope of preventing the recurrence of ulcer.

Now let us consider some personality and emotional factors in ulcer patients. What kind of a person develops an ulcer?

Constitutionally, he has been described as a usually slender individual, with a narrow intercostal angle, a scaphoid abdomen, low-normal blood pressure, low-normal basal metabolic rate, hyperactive reflexes and an unstable autonomic nervous system.

Psychologically, the ulcer patient fits into a fairly constant pattern. He is a rather special type of individual from the point of view of his personality make-up. Almost invariably he is found to be a tense, enthusiastic, conscientious and more or less perfectionistic individual.

Alvarez [2] in his vast writings on this subject has repeatedly emphasized this personality pattern in relation to ulcer formation. Alvarez originally called attention to a certain type of individual who is particularly prone to develop peptic ulcer and described him as a keen, nervous, active, hard-living person, upon whom surgeons are reluctant to operate because of the danger of recurrence of ulcer. Alvarez felt that arterial spasm may be the mechanism which links emotions and ulcer formation and after much study of this problem concluded that most ulcers are due basically to emotional factors and increased nervous tension. He has gone far beyond the usual formulation which takes into account only the physical and clinical data concerning the patient. In more recent contributions Alexander [1] has defined the "gastric type" of individual along similar lines and described him also as overly-independent, active and conscientious.

I have stated that the stomach has been called the "sounding board of the emotions." This is understandable since it is so richly supplied with autonomic nerve fibres, both sympathetic and parasympathetic, which connect cortical and subcortical centers with the viscera. These neural pathways mediate the earliest infantile emotional responses, inasmuch as the pleasures of being fed are psychologically retained in the mind and stored there as unconscious memories. Later in life, and without awareness on the part of the individual, impluses may be sent out by way of the autonomic nervous system from cortical, subcortical, and hypothalamic centers which follow the same infantile pattern. And since no other bodily function has played such an important role in the emotional life of the individual from infancy as has eating, the problem of peptic ulcer becomes extremely interesting when studied from this point of view. If psychodynamic factors in the life cycle of peptic ulcer are considered in this light, then the time-honored method of treatment may surely be improved. If, for example, hyperacidity is due to emotional stimuli descending from the cortex, psychological prevention of such stimuli from reaching the duodenal and gastric mucosa may be just as important as chemical neutralization of the acidity.

It has long been appreciated that cortical influences affect the physiological activity of the stomach. The early observations of Beaumont, recently brought up to date and beautifully demonstrated by Wolff [7] and his co-workers, show clearly the effect of the emotions on the vascular, vasomotor and secretory functions of the upper digestive tract. The importance of the mediation of abnormal nervous influences upon the stomach is also demonstrated by the relief obtained by ulcer patients from the use of belladonna or other antispasmodic drugs which affect the parasympathetic nerve endings in the gastro-intestinal tract. The effect of surgical resection of the vagus nerve is further striking evidence of the influence of the autonomic nervous system upon gastric activity, and this procedure will be discussed in some of the following papers.

TYPE OF EMOTIONAL NEED IN RELATION TO ULCER

Not all of the great variety of stomach disorders which may arise from different kinds of emotional conflicts result in ulcer formation. But there is a rather specific and interesting correlation with certain types of emotional needs and situations. The specific condition seems, in the present state of our knowledge, to be the frustrations of needs for maternal love—using the term in a broad sense. In order to treat these patients effectively, it is necessary, therefore, to familiarize one's self with these emotional needs and to recognize the signs of their frustration.

I use the term "maternal love" in a very broad sense to cover one's needs for affection, emotional support, help from others. Everyone has these needs, though in varying amount. These may be expressed psychologically in direct or sublimated forms of gratification. Some people require their love in the form of direct human interest and affection, in sexual

or platonic form. Others crave a more sublimated expression such as the need for power, recognition or fame. In any event, the thought which I am trying to convey is that all these needs for adult comfort, love and pleasure are psychologically—because of early emotional patterns—associated with the infant's emotional response to feeding. In such individuals, when these basic needs are frustrated, so inseparable have they become from the physiological action of the stomach, that they automatically stimulate gastric contractions and secretions which, when sufficiently intense and prolonged, may lead to ulcer formation.

Please do not misconstrue what I have said here to mean that the phenomena of duodenal ulcer as an end result of a long series of tissue changes, can be explained psychologically. In other words, the ulcer itself has no psychological significance whatever. What can be interpreted as a direct effect of psychological factors are the disturbances in secretions, motor activity and vascular supply of the stomach.

We must realize that permanent cure of a peptic ulcer cannot be accomplished when unconscious emotional factors are operative, until these factors are psychologically evaluated and ultimately eradicated. The many recurrences of peptic ulcer may be ascribable to the failure of physicians to take these factors at face value. Symptomatic relief, whether obtained by medical or surgical means, is not enough. Psychiatric management, particularly during the quiescent intervals of the ulcer, should be carried out in combination with proper medical management. It is only through the pooling of our efforts, somatic and psychologic, that we can hope to bring about a more permanent cure of this condition.

Simply stated, the psychosomatic concept of ulcer formation may be summarized as follows:

1. Emotional stimuli produce disturbed function.

2. Disturbed function ultimately results in structural changes.

3. The symptomatic treatment of structural or pathologic change may be medical or surgical, but fundamental prevention depends on the normalization of the emotional status (psychotherapy).

SUMMARY

In summary, then, the treatment of the ulcer patient includes not only dietary measures and medications, but in addition careful attention to the psychologic needs of the individual. We must acquaint the patient with the fact that he is confronted with the problem of a chronic disease which has a frequent tendency to recur. We should not be satisfied with mere treating of the acute ulcer but must direct over-all treatment to prevent relapse after the ulcer has healed. In order to protect against future recurrences, it is of fundamental importance to understand the psychological mechanisms and background on which the ulcer appears. To do this we must treat the whole human being and not just the hole in his stomach.

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QUESTIONS AND ANSWERS

DR. ZELICS: The first question I have is: "How can a general practitioner treat a peptic ulcer psychogenically?"

That is a pretty broad question. I shall try to answer it as briefly as I can.

I would say that the first important thing in treating the peptic ulcer patient is, as Dr. Hoffman emphasizes, to take time and get a really good history, not just of the ulcer iself, but a history of the whole life situation of the patient, before and during the time in which the ulcer has occurred. In other words, obtain a psychosomatic history and really get to know the patient. As Dr. Althausen has emphasized, oftimes relatively simple problems in the patient's life will be uncovered, which you can solve yourself. If, however, you are faced with an individual with deep-seated psychoneurosis, then that patient, just as the surgical case is referred to the surgeon, should be referred to the psychiatrist for major psychotherapy.

The next question is: "What is the relation of spastic colitis and peptic ulcer patient, especially in young men and women?"

There is an interesting similarity between the personality patterns of patients with ulcer and those with spastic colitis. Psychologically, both represent types which are basically dependent. The conscious reaction to this basic (unconscious) dependency is a high degree of conscientiousness and a need to be overly-independent. It appears from the studies of Alexander that ulcer patients seem to have a greater need to "receive" whereas the patients with spastic colitis have a greater need to "give."

QUESTION: "What is the relationship of the psychosomatic aspects of peptic ulcer and the higher incidence of recurrence in the spring and fall?"

I am afraid I cannot answer that, I shall defer to any of the other speakers who may be informed on that point. . . . (No response).

MODERATOR SNELL: The answer, I think, is that nobody knows. It does happen, and there is no valid explanation.

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